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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,603	07/28/2003	Karl A. Miller	Cognio63US3	4642
27896	7590	06/15/2006	EXAMINER	
EDEL, SHAPIRO & FINNAN, LLC 1901 RESEARCH BOULEVARD SUITE 400 ROCKVILLE, MD 20850			MILORD, MARCEAU	
			ART UNIT	PAPER NUMBER
			2618	

DATE MAILED: 06/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/628,603	MILLER, KARL A.	
	Examiner	Art Unit	
	Marceau Milord	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 49 is/are allowed.
- 6) ☒ Claim(s) 1,2,29-31 and 33 is/are rejected.
- 7) ☒ Claim(s) 3-28,32 and 34-48 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 28 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 32 is objected to because of the following informalities: “claim 32 should depend on claim 31”. Appropriate correction is required.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned

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with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1, 29 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 20, 29, 37, 39, 50 of U.S. Patent No 7035593 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because the removal of the features of accumulating over a time interval signal pulse data for signal pulses detected in the frequency band, wherein the accumulated signal pulse data comprises the start time, center frequency, bandwidth and duration for each detected signal pulse is not non-obvious over the claims of 7035593 B2 and therefore is not patentably distinct from each other.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary

skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-2, 29-31, 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kleider et al (US Patent No 6240282) in view of Ready et al (US Patent No 4597107).

Regarding claims 1-2, Kleider et al discloses a method for classifying signals occurring in a frequency band (figs. 1-2; col. 4, lines 46-51), comprising steps of: a. generating data for one or more attributes of radio frequency energy received in the frequency band over time; and executing against the data a plurality of classification procedures; executing each of the plurality of the classification procedures, one at a time, against the accumulated signal pulse data (col. 2, lines 47-56; col. 3, line 57-col. 4, line 67).

However, Kleider et al does not specifically disclose the step of identifying signals occurring in the frequency band.

On the other hand, Ready et al, from the same field of endeavor, discloses a signal detector and classifier for signals having inherent event periodicity such as digital modulations. Basically, this technique involves passing a band of frequencies through a plurality of paths of different or variable delay, combining pairs of bands having different delay, Fourier transforming or filtering the results of the combining to produce signals having magnitudes and phases related to received signal content. Frequency, symbol rate, and symbol phase are determined. Similar stages may be cascaded to detect higher orders of modulation (col. 2, lines 31-65; col. 4, lines 14-35). Furthermore, the timing and control circuit is also used to provide key receiver outputs, such as signal presence, modulation type, symbol rate, and symbol phase (col. 5, lines 13-49; col.

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12, lines 4- 36; col. 28, lines 51-68). Therefore, it would have been obvious to one of ordinary skill in the art to apply the technique of Ready to the communication system of Kleider in order to detect and classify specific modulation types and rates, and their performance degrades rapidly.

Regarding claims 29-31 and 33, Kleider et al discloses a processor readable medium encoded with instructions that, when executed by a processor, cause the processor to classify signals occurring in a frequency band (figs. 1-2; col. 4, lines 46-51), comprising a step of executing against data for one or more attributes for radio frequency energy a plurality of classification procedures each of which is dedicated to identifying a particular signal occurring in a frequency band (col. 2, lines 47-56; col. 3, line 57-col. 4, line 67).

However, Kleider et al does not specifically disclose the steps of identifying a particular signal occurring in a frequency band.

On the other hand, Ready et al, from the same field of endeavor, discloses a signal detector and classifier for signals having inherent event periodicity such as digital modulations. Basically, this technique involves passing a band of frequencies through a plurality of paths of different or variable delay, combining pairs of bands having different delay, Fourier transforming or filtering the results of the combining to produce signals having magnitudes and phases related to received signal content. Frequency, symbol rate, and symbol phase are determined. Similar stages may be cascaded to detect higher orders of modulation (col. 2, lines 31-65; col. 4, lines 14-35). Furthermore, the timing and control circuit is also used to provide key receiver outputs, such as signal presence, modulation type, symbol rate, and symbol phase (col. 5, lines 13-49; col. 12, lines 4- 36; col. 28, lines 51-68). Therefore, it would have been obvious to one of ordinary

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skill in the art to apply the technique of Ready to the communication system of Kleider in order to detect and classify specific modulation types and rates, and their performance degrades rapidly.

Allowable Subject Matter

6. Claims 3-28, 34-48 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Allowable Subject Matter

7. Claim 49 is allowed.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Takaba et al discloses a multimedia signal processing apparatus that comprises communication service units having a plurality of types of signal processing modes corresponding to a plurality of types of communication service classifications, a communication service classification identifying unit for identifying, on the basis of signal processing request information on one call communicated from a higher-rank node.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marceau Milord whose telephone number is 571-272-7853. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on 571-272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MARCEAU MILORD

Marceau Milord
Primary Examiner
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6-6-06